

## REMARKS

Upon entry of the above amendment, claims 1-5, 7, 11 and 17-20 are pending in the present application. Applicants amended claims 1, 2, 4, 5, 7, 17 and 20 to more clearly define the present invention. The specification provides support for the amendments and no new matter has been introduced by the instant amendments.

### Claim Rejection under 35 U.S.C. § 112, first paragraph

Claims 1-5, 7, 11 and 17-20 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner argues that the amendment to claims 1 and 5 wherein sulfur represents  $-\text{S}(\text{O})-$  or  $-\text{S}(\text{O})_2-$  is not described in the specification. Applicants respectfully disagree. In order to expedite prosecution, Applicants amended claims 1 and 5 to better clarify the invention. Amendments are supported on page 9 of the specification:

Sulfur represents the radicals  $-\text{S}-$ ,  $\text{--}\overset{\text{||}}{\text{S}}\text{--}$  and  $>\text{S}\text{=}$  wherein the substituents on sulfur are defined within claim 1 and include oxo ( $=\text{O}$ ).

Applicant respectfully requests withdrawal of the 35 U.S.C. §112, first paragraph rejection.

### Claim Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-5, 7, 11 and 17-20 remain rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention.

The Examiner rejected the term "carbonyl", "sulfur", " " and "oxy" as being vague and indefinite because the definition of R1, R2, R3 and R4 in claim 1 fails to specify exactly what is attached to the sulfur, oxy and carboxy.

Applicants disagree that the substituents on these groups are not defined. However, in order to expedite prosecution, Applicants amended claim 1, 2, 4 and 5 to better define the invention.

R1, R2 and R3 are defined as being:

- Unsubstituted group: hydrogen, cyano, halo, nitro
- Optionally substituted group: optionally substituted ( $C_{1-7}$  alkyl,  $C_{2-7}$  alkenyl,  $C_{2-7}$  alkynyl, amino, cycloalkyl, heterocycloalkyl, aryl, heteroaryl); or
- Substituted groups: substituted oxy, substituted carbonyl, substituted sulfur;

Furthermore claim 1 defined the substituents on R1, R2 and R3 as being (whether optional or mandatory substituted as it is the case for oxy, carbonyl and sulfur):

- Unsubstituted substituents: hydrogen, oxo, cyano, halo, nitro or
- Optionally substituted substituents: optionally substituted ( $C_{1-7}$  alkyl,  $C_{2-7}$  alkenyl,  $C_{2-7}$  alkynyl, aryl, heteroaryl, amino), or
- Substituted substituents: substituted oxy, substituted sulfur, substituted sulfinyl, substituted sulfonyl;

and finally, the substituted substituents (whether optionally substituted or substituted) are substituted by a substituent independently selected from the group:

- Unsubstituted substituents: hydrogen, oxo, cyano, halo, nitro, hydroxy,  $C_{1-7}$  alkyl,  $C_{2-7}$  alkenyl,  $C_{2-7}$  alkynyl, amino, cycloalkyl, heterocycloalkyl, aryl, heteroaryl.

The same break down of substituents and substituents' substituents applies to claims 2 and to claims 4 and 5 with respect to R1', R2', R3' and R4', and R"1 and R"2 groups.

Therefore Applicants respectfully request withdrawal of the 35 U.S.C. §112, second paragraph rejections with respect to rejections 2[(a), (b), (c), (i), (j), (k)-(s), (x)-(z)]; 2[(aa) to (cc)] and 2 [(gg)-(ii)].

Claim 17 remains rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, for the reason that variables  $R_2'$ ,  $R_3'$ ,  $Y'$ ,  $Z'$ ,  $Q'$  and  $R_4'$  in Formulae IX and XI are not defined. Applicants point out that the line through the scheme was meant to delete the entire schemes therefore Formula IX and XI were deleted from claim 17.

Therefore Applicants respectfully request withdrawal of the 35 U.S.C. §112, second paragraph rejections with respect to rejections 2 [(ww) and (yy)] and 5 (b).

Claim 7 was amended to remove the term "respectively" which the Examiner rejected for being vague and indefinite.

Claim 20 was amended to include the subscripts for  $R'_1$ ,  $R'_2$  and  $R'_3$  and therefore should overcome the Examiner's rejection for insufficient basis in claim 5.

The Examiner rejected the limitation "heterocycloalkyl" in the definition of the substituents on R1 in claim 2 as lacking antecedent basis. Applicants amended "heterocycloalkyl" to "heteroaryl" which find support in claim 1.

The Examiner rejected the term "sulfonyl" in claim 2 for lacking antecedent basis in claim 1. Applicants respectfully disagree. The Term "sulfonyl" has antecedent basis in claim 1. R1 is defined as being "sulfur" in claim 1 wherein "Sulfur" is defined on page 9 to

be the radical  $\text{>S}\equiv$ . Claim 1 also defines substituents on R1 to be: 1. Oxo. Oxo is defined as being  $=\text{O}$ . Therefore a sulfonyl radical  $-\text{S}(\text{O})_2-$  has antecedent basis in claim 1.

Therefore Applicants respectfully request withdrawal of the 35 U.S.C. §112, second paragraph rejections with respect to rejection 2 (n).

### Conclusion

Applicants have addressed each and every issue set forth by the Examiner. Applicants submit that the claims are in good condition for allowance.

If the Examiner believes for any reason that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (617)871-5027.

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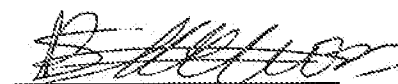
If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 50-4409 for any additional fees under 37 C.F.R. 1.16 or under 37 C.F.R. 1.17; particularly extension of time fees.

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Respectfully submitted,



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